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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,908	10/28/2003	Seong Hak Moon	P-0606	3944
34610	7590	12/17/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			LEE, WILSON	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,908

Applicant(s)

MOON, SEONG HAK

Examiner

Wilson Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 15-20 is/are allowed.
6) ☒ Claim(s) 1, 6 and 7 is/are rejected.
7) ☒ Claim(s) 2-5 and 8-14 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 7, are rejected under 35 U.S.C. 102(e) as being anticipated by Browning et al. (6,409,564).

Regarding Claim 1, Browning discloses a method for for eliminating contamination of a FED (field emission display) by applying a direct current high voltage to an anode electrode of the FED, an aging method of the FED, comprising:

- converting a direct current high voltage (100V-3000V) (See Col. 6, lines 34-36) into a second high voltage pulse inherently having a frequency and a duty cycle (See Col. 6, lines 8-13) varied according to time; and
- applying the converted first high voltage pulse or second high voltage pulse to an anode electrode (anode screen 16) of the FED (See Figure 2).

Regarding Claim 6, Browning discloses the steps of converting the first or second high voltage pulse into a high voltage pulse (Col. 6, lines 34-40, Col. 7, lines 11-13) of

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low energy, and applying the low energy high voltage pulse to the anode electrode (16) of the panel.

Regarding Claim 7, Browning discloses an aging apparatus for eliminating contamination of a FED (field emission display) by applying a direct current high voltage to an anode electrode of the FED, an aging apparatus of a FED, comprising:

- an aging controlling unit (See Figure 2) for converting a direct current high voltage into a second high voltage pulse (100V-3000V) (See Col. 6, lines 34-36) inherently having a frequency and a duty cycle (See Col. 6, lines 8-13) varied according to time and applying the converted second high voltage pulse to an anode electrode (16) of a panel.

Allowable subject matter

Claims 2-5, 8-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-20 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art neither discloses nor suggests:

applying first high voltage pulse the converted first high voltage pulse to an anode electrode of a panel for a preset pre-aging time; and converting a direct current high voltage into a second high voltage pulse having variable frequency and duty cycle and applying the converted second high voltage pulse to the anode electrode of the panel for a preset main aging time such as required by claim 15.

- a means for converting the direct high voltage into a second high voltage pulse having variable frequency and duty cycle and applying the converted second high voltage pulse to the anode electrode of the panel for a preset main aging time; and a means for applying a predetermined voltage to a scan driving unit of the FED in applying of the second high voltage pulse to the anode electrode such as required by claim 18.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Browning et al. (6,500,040) discloses a method for cleaning phosphor screens for use with field emission displays.

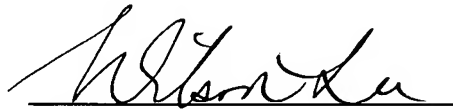
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Wilson Lee', is written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

12/13/04